

REMARKS

Applicant respectfully requests the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

Status of the Claims

Claims 1-7 are currently pending in the present application. The Office Action is Final. Claims 1-3 have been amended without prejudice or disclaimer. No new matter has been added by way of the amendment, because the amendment is supported by the present specification and the amendment to claims 1-3 further define and clarify the present invention. Support for claims 1 and 3 can be found on page 29, line 20 of the present specification. Claim 2 further defines that the base particles are obtained by a spray-drying method. Support for claim 2 can be found on page 6, line 24. Claims 6 and 7 are new. Support for claims 6 and 7 can be found within the present specification on page 29, lines 19-21. Thus no new matter has been added.

Based upon the above considerations, entry of the present amendment is respectfully requested.

Claim Rejection Under 35 U.S.C. § 102(b)

Claim 2 stands rejected under 35 U.S.C. § 102(b) as anticipated by **France et al.**, U.S. Patent No. 6,063,751 (hereinafter "France et al.").

The Examiner is kindly requested to reconsider the rejection for the following reasons.

Legal Standard for Determining Anticipation

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.” *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Distinctions Over the Cited Art

In the Office Action dated August 3, 2007 (hereinafter “Office Action”), it was stated that Comparative Example IV of the France *et al.* reference teaches a detergent composition comprising 40 wt% sodium C₁₂₋₁₆ alkyl sulfate surfactant, 30 wt% sodium carbonate, 30 wt% sodium tripolyphosphate (STPP, which is also water soluble), having a mean particle size of 300 microns (see col. 11, lines 21-61). Additionally, it was also stated that although the comparative example is outside the invention of France *et al.*, it still must be considered as a prior art reference even if it has been described as somewhat inferior to some other product for the same use. Applicants respectfully traverse.

The detergent within France *et al.* is substantially different from the present invention. France *et al.* discloses a process which includes taking a surfactant paste and mixing in dry starting materials in a high speed mixer to form agglomerates (See France *et al.*, Abstract). However, when the detergent particle are produced by similar processes, in order to suppress the particle from being aggregated and/or becoming coarse due to the adhesive property of the anionic surfactant produced by subsequent neutralization, it is necessary to keep its granular shape by operating the agitation mechanism for mixing and the cutting mechanism for disintegration and/or dispersion at high speeds. Desiring a smaller detergent particle having a small particle would require optimizing the agitation and/or cutting conditions. However, it would be difficult to efficiently obtain the detergent particle, and the particle size distribution of the resulting particle would become wider.

Additionally, France *et al.* uses a highly viscous surfactant paste or a liquid acid precursor of an anionic surfactant and dry detergent materials to form detergent agglomerates (See France *et al.*, Col. 4, lines 29-35). In the conventional process, the process is basically carried out by granulating raw materials with disintegrating, thereby making it difficult to efficiently obtain detergent particles having a sharp particle size distribution in a relatively small particle size range.

France *et al.* does not use a base particle in order to form a detergent particle, as described in the present invention. In the present invention the base particles are obtained by spray-drying. From the cross section of a base particle shown in Fig. 1 of the present application (also see page 5, lines 2-6 of the present specification for a brief description of the drawings), the

base particles of the present invention would be quite different from the agglomerates of France *et al.*

In the present invention, the water-soluble solid alkali inorganic substance is contained in a fine shape in the base particle in an amount far exceeding the amount equivalent for neutralization and the reactive area is increased by making the particle size of the base particle itself smaller, so that the dry-neutralization is carried out on the surface of the base particle with a fast reaction rate. This results in the detergent particles taking a structure in which the base particle is coated with a non-soap anionic surfactant, it improves detergent particle yield, and the dissolution surface area is larger, thereby exhibiting an effect of an excellent dissolubility.

Besides not having a base particle, France *et al.* discloses a method of dry-neutralizing without spray-drying. Spray drying is discouraged in France *et al.* since it uses dielectric heating means such as a microwave or radio frequency dryer (See France *et al.*, Col. 3, lines 3-14) for manufacturing efficiencies; spray drying has no product enhancing quality so alternative measures were used.

The detergent particles of the present invention comprise the base particles having a sharp particle distribution, a low bulk density and an excellent dissolubility (see page 5, line 17 page 6, line 7 and the Examples of the present specification). Therefore, France *et al.* is substantially different from the present invention wherein base particles are obtained by spray-drying.

Thus, because of the lack of disclosure of all features as instantly claimed, the rejection in view of France *et al.* is overcome.

Applicants respectfully request reconsideration and withdrawal of the present rejection.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 and 5 stand rejected under 35 U.S.C. § 103(a) as unpatentable over **France *et al.***

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as unpatentable over **Kubota *et al.***, EP 0,969,082 (hereinafter “Kubota *et al.*”).

Claims 1-2 and 5 stand rejected under 35 U.S.C. § 103(a) as unpatentable over **Riddick *et al.***, U.S. Patent No. 5,573,697 (hereinafter “Riddick”).

Reconsideration and withdrawal of these rejections is respectfully requested based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

A proper obviousness inquiry requires consideration of three factors: (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations; (2) whether or not the prior art would have taught, motivated, or suggested to those of ordinary skill in the art that they should make the claimed invention (or practice the invention in case of a claimed method or process); and (3) whether the prior art establishes that in making the claimed invention (or practicing the invention in case of a claimed method or process), there would have been a reasonable expectation of success. *See* M.P.E.P. § 2143.

Graham v. John Deere, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), has provided the controlling framework for an obviousness analysis. A proper analysis under § 103(a) requires consideration of the four *Graham* factors of: determining the scope and content of the prior art; ascertaining the differences between the prior art and the claims that are at issue; resolving the

level of ordinary skill in the pertinent art; and evaluating any evidence of secondary considerations (e.g., commercial success; unexpected results). 383 U.S. at 17, 148 USPQ at 467.

The teaching, suggestion, motivation test is a valid test for obviousness, but one which cannot be too rigidly applied. *See KSR International Co. v Teleflex Inc.*, 82 USPQ2d 1385, 1395 (U.S. 2007). While the courts have adopted a more flexible teaching/suggestion/motivation (TSM) test in connection with the obviousness standard based on the *KSR v. Teleflex* case which involved a mechanical device in a relatively predictable technological area, it remains true that, despite this altered standard, the courts recognize inventors face additional barriers in relatively unpredictable technological areas as noted in *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, 83 USPQ2d 1169 (Fed. Cir. 2007) (since TSM test can provide helpful insight if it is not applied as rigid and mandatory formula, and since, in cases involving new chemical compounds, it remains necessary to identify some reason that would have led chemist to modify known compound, in particular manner, in order to establish *prima facie* obviousness of new compound).

“In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the

knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Distinctions Over the Cited Art

Rejection of claims 1 and 5 based on France et al.

The Office Action states that France *et al.* teach the features as described in the above anticipation rejection, but fails to disclose the process for making the detergent particles. The Examiner also noted that present claim 1 is a product-by-process claim, hence, any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making. Applicants respectfully traverse.

As described above, France *et al.* is substantially different from the present invention wherein base particles are obtained by spray-drying, and by the cross section of a base particle of the present application, the base particles of the present invention are quite different from the

agglomerates of France *et al.* Thus, it is clarified by the product-by-process limitation that the product *per se* of the present invention is different from that of France *et al.*

Additionally, Applicants amended claim 1, without prejudice or disclaimer, to further distinguish the structural limitations of the detergent particle within the present invention.

In light of the above, France *et al.* fails to establish a *prima facie* case of obviousness.

Rejection of claims 1-5 based on Kubota et al.

By the above claim amendments, it is clarified that the technical concept is quite different between the present invention and Kubota *et al.* That is, in the invention of Kubota *et al.*, detergent particles having a higher bulk density are obtained (*See* Kubota *et al.*, page 12, lines 11-12) while those having a lower bulk density are obtained in the present invention.

The Examiner notes at the last paragraph of page 5 in the Office Action that Kubota *et al.* teaches use of a water-insoluble inorganic compound other than zeolite. According to the Examples, however, Kubota *et al.* teaches away use of zeolite in the amount of 10 % by weight or less as in the present invention.

According to the present claims, the amount of zeolite contained in the base particles of the present invention is 10 wt.% or less. However, Kubota *et al.* discloses detergent particles containing base particles that contain a zeolite in an amount of 50 wt.% (see Example 4 in connection with Table 1). The base particles of claim 2 of the present application therefore differ from the base particles of Kubota *et al.*

For the same reason, the detergent particles of claim 1, the process of claim 3 and the detergent composition of claim 5 also differ from Kubota *et al.*

Example 4 of Kubota *et al.* discloses a detergent composition comprising base particles that are dry-neutralized with a liquid acid precursor of an anionic surfactant. The detergent composition of the present invention differs from the detergent composition of Kubota *et al.* in that the base particles may contain a zeolite in an amount of 10 wt.% or less, while the base particles used in the detergent composition of Kubota *et al.* contain 50 wt.% of a zeolite.

However, when the zeolite is formulated in a large amount, there is the possibility that the zeolite decomposes during the dry-neutralization reaction (*See* page 10, lines 15-17 of the present specification).

In Kubota *et al.* there is no indication as to the risk of decomposition of the zeolite during the dry neutralization step if the amount of zeolite used becomes too high. There was no motivation to use less zeolite in an attempt to keep zeolite decomposition in check. The skilled artisan based on Kubota *et al.* would not have been motivated to use smaller amounts of zeolite in the base particles of Kubota *et al.* since Kubota *et al.* is silent to the potential risk of decomposition of the zeolite.

Therefore, for the Kubota *et al.* reference cited by the Examiner, the *prima facie* case of obviousness was not established.

Rejection of claims 1-2 and 5 based on Riddick

As in France *et al.*, Riddick discloses a method of dry-neutralizing without spray-drying. Therefore all the above arguments for France *et al.*, also apply to Riddick, since the concept of base particles and dry-neutralizing with spray-drying are absent within Riddick.

Accordingly, Riddick is substantially different from the present invention wherein base particles are obtained by spray-drying. The detergent particles of the present invention comprise

the base particles having a sharp particle distribution; a low bulk density and an excellent dissolubility (see page 5, line 17 to page 6, line 7 and the examples within the specification).

Based upon the claim amendments, and the arguments above, an artisan would not be motivated by Riddick to form a base particle of the present invention since the structural limitations are absent within the reference. Therefore, in the case of the Riddick references (as in France *et al.*) the *prima facie* case of obviousness was not established.

In light of all the above arguments and amendments, the *prima facie* case of obviousness was not established. Applicants respectfully, request reconsideration and subsequent withdrawal of the above rejections.

In view of the above amendment, Applicants believes the pending application is in condition for allowance.

CONCLUSION

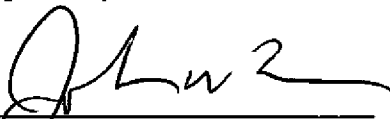
In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Paul D. Pyla, Reg. No. 59, 228, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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